

Examiner's Amendment (April 26, 2005)

IN THE CLAIMS:

Please amend Claims 1, 8, and 9, as follows.

1. (Currently Amended) A diffractive optical element comprising:
a first diffractive optical part having a phase-type diffractive grating; and
a second diffractive optical part having a phase-type diffractive grating
formed of a material differing from that of said first diffractive optical part;
said first diffractive optical part and said second diffractive optical part
being disposed in proximity to each other with a space therebetween;
each of said first diffractive optical part and said second diffractive optical
part having a mark for aligning them, said mark being in ^{the area} ~~an area~~ where the diffractive
grating is provided;
the depth or height of said mark is 10% or less of the depth or height of the
diffractive grating of each of said first diffractive optical part and said second diffractive
optical part.

2. (Previously Presented) The diffractive optical element of Claim 1,
wherein the diffractive grating of each of said first diffractive optical part and said second
diffractive optical part is a diffractive grating formed into a concentric circular shape, and
said mark has a size of 0.1% or less of a projection area of a first diffractive grating area as
counted from the center.

3. (Previously Presented) The diffractive optical element of Claim 2, wherein the influence of said mark upon the optical performance of said diffractive optical element is smaller than the reduction of optical performance caused by manufacturing imperfections.

4. (Canceled)

5. (Canceled)

6. (Original) An optical system provided with the diffractive optical element of Claim 1.

7. (Canceled)

8. (Currently Amended) A method of manufacturing a diffractive optical element comprising:

the step of molding a first diffractive optical part having a phase-type diffractive grating;

the step of molding a second diffractive optical part having a phase-type diffractive grating of a material differing from that of the first diffractive optical part;

the step of aligning the first diffractive optical part and the second diffractive optical part with each other while observing a mark present in an area where the ~~the area~~ ^{the area}

diffraction grating is provided on each of the first diffraction optical part and the second diffraction optical part; and

the step of fixing the first diffraction optical part and the second diffraction optical part with a space therebetween,

wherein the depth or height of the mark is 10% or less of the depth or height of the diffraction grating of each of the first diffraction optical part and the second diffraction optical part.

9. (Currently Amended) A metal mold for manufacturing a diffraction optical element comprising:

a first area for molding a phase-type diffraction grating; and

a second area for molding a mark for aligning said diffraction grating with another member, said second area being provided in ~~an area~~ the area for forming the diffraction grating molded by said first area,

wherein the depth or height of the second area for molding the mark is 10% or less of the depth or height of the first area for molding the diffraction grating.